## Correspondence.

Sir,—Can you inform me of any cheap material which I can introduce between a stone wall and the plaster of a room, to absorb the moisture caused by the condensation of the atmosphere on the former? Battening and brick lining will both effect this, and I have employed both in my own residence, but for cottages and outbuildings I wish to find a somewhat cheaper process, as bricks here come to no less than 4*l.* 7*s.* 6*d.* per 1,000, laid down. The native stone is of a remarkably close texture, and, from the cause above stated, plaster applied directly to the wall is ruined in no time.

I am, Sir, &c., H. H.

Hafod.

## Miscellanea.

The Effect of Making a Window too Narrow.—Miss Pardoe, in her "Louis XIV." gives the following anecdote. On one occasion, the king went to examine into the progress of the palace, accompanied by Louvois, when he remarked that a particular window was out of proportion, and did not harmonize with the rest; the minister, however, jealous of his dignity as comptroller of the works, would not admit the objection, but maintained that it was perfectly similar to the others. The king made no reply; but on the following day he returned to Trianon, and desired Le Nôtre to declare his opinion as to the size of the disputed window. Le Nôtre, fearful of offending either the monarch or his minister, endeavoured to give an evasive answer, upon which Louis commanded him to measure it carefully, and he was reluctantly compelled to obey. Louvois, meanwhile, murmuring at the pertinacity of the king, and Louis himself walking to and fro in great irritation. The result of the trial proved that the window was too small; and the monarch had no sooner ascertained the fact, than he turned angrily to his minister, declaring that he was becoming weary of his obstinacy, and that it was fortunate he had superintended the work himself, or the building would have been crooked. As this scene had taken place in the presence of both courtiers and workmen, Louvois was deeply stung; and on entering his own house, he exclaimed furiously, "I am lost if I do not find some occupation for a man who can interest himself in such trifles. There is nothing but a war which can divert him from his buildings, and war he shall have. I will soon make him abandon his trowel." He kept his word, and Europe was once more plunged into a general war, because a window had been made a few inches too narrow, and that a king had convicted a minister of error.

Smelting by Electricity.—The lately patented process of smelting copper by means of electricity, says the *Morning Herald*, is likely to effect a change that will be quite prodigious. It produces in less than two days, what the old process required three weeks to effect. And the saving of fuel is so vast, that in Swansea alone, the smelters estimate their annual saving in coals at no less than five hundred thousand pounds. Hence it is clear that the price of copper must be so enormously reduced, as to bring it into use for a variety of purposes, from which its cost at present excludes it. The facility and cheapness of the process, too, will enable the ore to be largely smelted on the spot. The Cornish mine proprietors are anxiously expecting the moment when they can bring the ore which lay in the mine yesterday, into a state to be sent to market to-morrow; and this at the very mouth of the mine. In Australia, also, the operation of this discovery will be of the utmost importance. Ten thousand tons of copper ore were sent from Australia to England last year, to be smelted at Swansea, and the result was only 1,600 tons of copper. But Australia in future will smelt her own copper, by a thirty-six hours' process; saving all this useless freight of the 8,400 tons of refuse; and saving also the cost of the old and expensive process. In a very few years, Australia will send to market more copper than is now produced by all the rest of the world. But if our future penny-pieces are to bear any proportion to the reduced cost and value of the metal, they must be made of the size of dinner-plates.

Projected Works.—In the newspapers of the past week, advertisements have been issued for contract-tenders for the erection of a fever hospital at Bedford; a new church at Greenwich; shop and offices at Bradford; a pauper lunatic asylum at Birmingham; a warehouse and other buildings, and alteration of premises at Hales Owen; also for fronting east end of Hanley church with stone, and putting in a new east window; for finishing two villas at Tollington-park; repairing shingle, timber-work, and spire of All-Saints' church, Maldon; 280 square yards of tooled Yorkshire flagging and laying down at East Retford; for laying down York paving with granite kerb, also granite channelling and paved crossings, and for broken Guernsey and other granite, for parish of St. Pancras; a supply of gravel at Maldon; also for the whole works required in the extension of workshops and stores, premises, &c., and for a coke-shed and large water-tank, on the Manchester and Leeds Railway, near Miles Platting, Manchester; the works on 2¼ miles of the Glasgow, Ayr, &c., Railway, in two contracts; the formation of portions of the Newcastle and Carlisle Railway; and for 700 tons malleable iron rails, 250 tons metal chairs, 12,300 Baltic sleepers, 24,600 oak keys, 49,000 oak pins, and 6 miles of fence railing for same line.

Glasgow Cathedral.—The Government works in renovation of this favourite edifice of the citizens of Glasgow, are said to be now in constant progress. The north transept has been rebuilt, and the great window with that of the south transept, renewed. The upper part of the east gable has also been rebuilt. The north parapet walls have been rebuilt the whole length, both of the nave and the choir, and all the walls outside repaired and pointed. The south-east corner, near the great western door, where formerly stood the Consistory Court, has also been completely rebuilt, and the south parapet to the nave restored. The great western door is to be entirely renewed, as well as the modern window above it. The south-east door, which has been used, perhaps, since the reformation, and by which entrance was got to the outer and inner high churches, is being converted into a window, in its original form. In the interior, the walls have been cleaned and repaired, and the ceiling of the nave renewed, while a new floor of concrete has been laid down over the arches to the side aisles. The whole of the roof has likewise been repaired, and strengthened by diagonal braces. The groined ceiling of the great tower is under repair. In the Lady Chapel the stone-work and pillars have been cleaned and repaired, and new steps and pavement laid down. In the Chapter House, the walls have undergone a similar treatment, and new pavement and new steps leading to it completed. The main crypt, and crypt under the Chapter House, have likewise been renewed.

Improvement of Levelling-Staves.—Sir: I beg leave to inform you of an improvement which is applicable to the mode of levelling with the staves now in use, which suggestion it may not be inappropriate to introduce in your journal. It simply consists in affixing to every foot on the staves a distinct colour, in order more readily to make the observation without the necessity of frequently being obliged to raise them up, and thereby often causing an error. The plan I propose is to use the following colours, viz., for the one foot, green; two feet, red; three feet, blue; four feet, yellow; and five feet white or not coloured. There will be no necessity for any other colours than a repetition of those mentioned for the other compartments, as the difference in width of the pieces will easily be remembered, as well as the colours themselves. —I am, Sir, &c., A. M. Ross, land surveyor, &c., Stamford-street.

American News.—The following alarming intimation has appeared in the *New York Sun*—"London has been sinking gradually for some years. The Thames is rising in the same ratio." Our observant contributor who doubtless originated this alarming report, will perceive that our American brethren have sent it back to him with compound interest. The Thames is rising, ergo London is sinking. The sequence is inevitable, and indeed alarming!

Muntz's Metal for Sheathing Ships.—The Admiralty have afforded Mr. Muntz, M.P., an opportunity of testing his patent sheathing metal on a man-of-war at Portsmouth.

Analysis of Vapour from Chalk-fuel.—A correspondent of the *Hampshire Advertiser*, Mr. Henry Osborn, who appears to have taken an interest in the subject of the original paragraph from The Builder, so extensively circulated through the newspaper press, has analyzed the atmospheric product of the combustion of chalk-fuel, and fully disproved the supposition of Mr. Murray, of Hull, that chalk would be dangerous in ordinary use for fuel. The combustion of 8 lbs. of chalk with an equal portion of coal produced "an increase of one cubic inch (within a trifling fraction) in 10,000, which is not sufficient to render the air deleterious. The carbonic acid which escapes during the conversion of chalk into lime is carried up the chimney. It is probable, however," he adds, "that a chalk fire might prove injurious when made in a large old-fashioned open fireplace, allowing room for persons to sit under the chimney; the carbonic acid having space to disperse itself might affect those sitting near, but I do not believe it would impregnate the air in the room to any extent." We hear that a considerable quantity is already used by the poor at Winchester.

Western Literary Institution.—At this institution, on Monday evening, an interesting paper was read by Mr. W. Smith, C.E., "On the best means of protecting Buildings, &c., from the effects of discharges of Atmospheric Electricity." These meetings are a new feature in this institution, and will, no doubt, prove attractive. The first of these meetings was on the 5th April, when a paper by M. Claudet, "On the recent Improvement in the Daguerreotype Process," was read. On the previous Thursday evening, Mr. W. Higgs delivered a lecture on iron and its manufactures, in which the lecturer gave a description of all the various processes of that important branch of our manufacturing art. We are glad to perceive that the committee of this institution are making a move in advance, and that they are endeavouring to promote its interests by the only legitimate means which should be adopted, viz. by keeping pace with the scientific and literary spirit of the age, and laying before its members the fullest available information upon every new subject of interest.

Sewage Manure.—The present mode of cleansing and draining our large towns, and disposing of their refuse, will doubtless be regarded by the next generation with the same feelings of surprise with which we view the strange customs of barbarous people. It is a striking example, on the grandest scale, of inefficiency and extravagance. We shall search in vain for any similar instance of wholesale waste of resources. Not content with polluting our rivers, and heaping upon their banks masses of offensive matter most injurious to health, we are constantly pouring into them treasures which cannot be estimated at a less sum than several millions a year. In the metropolis alone the value of the liquid refuse annually carried into the Thames, and lost to agriculture, amounts, according to the very lowest estimate, to half a million pounds, and according to the highest to little short of four millions.—*Analysis of Evidence on Metropolitan Sewage Manure.*

Honest Building.—We have received a letter from Mr. Edward Banks, architect of the Staffordshire Hospital, containing the following, with reference to the letter signed "Strength," in our last:—"I think it due to the builders of the South Staffordshire Hospital, to state, that the works at that building are all being done *to the specification* and *to my satisfaction*; and those who *know* me will be perfectly satisfied, after this statement, that the whole of the works are of the most substantial kind." If the description of the mode pursued given by our correspondent, "Strength," be correct, and it is so in more buildings than one, as we well know, or we should not have inserted the letter, we cannot too loudly protest against it. Messrs. Higham and Sons, who state they are the builders employed, have requested the name and address of the writer. It can scarcely be necessary to say, that it would be quite contrary to custom to comply with their desire.

The Marine Glue for caulking ships, was stated by Captain Pechell, the other day, in the Commons, to have been found to be an effectual substitute for pitch, especially under the influence of a strong sun. A saving, too, of 20,000*l.* a year is anticipated from its use.

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